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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/633,332 | 07/31/2003 | Ernest D. Miller | 26669/4:2 | 4195 |

3528 7590 02/14/2005

STOEL RIVES LLP
900 SW FIFTH AVENUE
SUITE 2600
PORTLAND, OR 97204

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| EXAMINER |
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WILLIAMS, THOMAS J

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| ART UNIT | PAPER NUMBER |
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3683

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,332

Applicant(s)

MILLER, ERNEST D.

Examiner

Thomas J. Williams

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Acknowledgment is made in the receipt of the oath filed January 23, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,251,076 to Burke.

Re-claims 1 and 4, Burke discloses in figures 13-16 a micro-support cushion system, comprising: a planer base 310, or base sheet and top sheet; a plurality of spring structures 300 arranged on the base or the respective sheets; each spring structure comprises a top compression layer 304 with a contact surface area and a corresponding bottom compression layer 302 with a contact area, both layers are formed of compressible materials, the spring structures are substantially aligned with one another; each bottom layer 302 has a larger contact surface (due to the step surfaces) than the top layer 304 thereby providing a higher compression rate than the top layer (see column 10 lines 37-49); any additional force applied to the top layer 304 is substantially transferred through the top layer to the bottom layer.

Re-claim 2, the spring structures are interconnected.

Re-claim 3, the pattern is such that the spring structures are spaced from one another and thus are capable of being spaced apart by 0.25 inches.

Re-claim 5, the compression structure comprises concentric cylinders.

Re-claim 6, the compression structure comprises a plurality of frustum shaped layers, see figure 14.

Re-claim 7, Burke discloses a layered spring assembly comprising: a layered spring structure and a corresponding compression structure formed from compressible materials, the structures are aligned with each other.

Re-claims 8 and 9, the compression structure is substantially flat (each layer of 302 is flat); the compression structure is layered.

Re-claim 10, the spring structure 304 includes an integrally formed central plunger; the compression structure 302 includes a recess sized to receive the plunger; the plunger has a length greater than the height of the recess (note the interaction between the plunger and the step portions of the recess), the plunger is compressed when fully engaged in the recess.

4. Claims 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,521,979 to Blaser.

Re-claim 4, Blaser discloses a micro-support structure comprising: a base sheet 14 or 25 and a top sheet 14 or 25; a plurality of spring structures are formed on the base sheet (as in figure 4c of the instant application); a plurality of compression structures (such as 15) are formed on the top sheet, the compression structures are aligned over the spring structures, such as pad 25.

Re-claims 5 and 6, the compression structure 15 comprises concentric cylinders 17, 18, the cylinders have frustum shaped layers, see figure 5.

Re-claim 7, Burke discloses a layered spring assembly comprising: a layered spring structure and a corresponding compression structure formed from compressible materials, the structures are aligned with each other.

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Re-claims 8 and 9, the compression structure is substantially flat (when interpreting the compression structure as 25, this is consistent with figure 4c in the instant application); the compression structure is layered (when interpreting the compression structure as 15).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Willison et al., Buehrig, Henley, Szonn, Van Goubergen, Willison, Selner, Gooding, and Sasaki (JP 55-54738) each teach a support cushion system.

6. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346 (after April 2005 the new telephone number will be 571-272-7128). The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci, can be reached at (703) 308-3668 (after April 2005 the new telephone number will be 571-272-7099). The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

February 10, 2005

THOMAS WILLIAMS
PATENT EXAMINER

Thomas Williams

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2-10-05